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PROGRAMME MATTERS

Final report of the Ad Hoc Working Group on Persistent Organic Pollutants of the Intergovernmental Forum on Chemical Safety

Note by the Executive Director

1. The Executive Director has the honour to circulate herewith for the information of the Governing Council the final report of the Ad Hoc Working Group on Persistent Organic Pollutants of the Intergovernmental Forum on Chemical Safety (IFCS).

2. The Ad Hoc Working Group was established by IFCS in response to an invitation contained in paragraph 1 of Governing Council decision 18/32 of 25 May 1996 and met in Manila on 21-22 June 1996.

3. The report of the Executive Director on the implementation of decision 18/32, which includes the recommendations of IFCS for international action on persistent organic pollutants, will be before the Council at its nineteenth session as document UNEP/GC.19/23.

* UNEP/GC.19/1.

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IFCS/WG.POPs/Report.1
1 July 1996

Intergovernmental Forum on Chemical Safety

Final Report of the IFCS Ad Hoc Working Group on Persistent Organic Pollutants

FINAL REPORT

21-22 June 1996

Manila, Philippines

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Decision 18/32 on Persistent Organic Pollutants adopted by the UNEP Governing Council at its May 1995 meeting invited the Inter-Organization Programme for the Sound Management of Chemicals, working with the International Programme on Chemical Safety, and the Intergovernmental Forum on Chemical Safety (IFCS) to initiate an assessment process on persistent organic pollutants, starting with a list of twelve substances. It further invited the IFCS to develop, based on the results of the assessment process and the outcome of the Washington Conference to Adopt a Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, "recommendations and information on international action, including such information as would be needed for a possible decision regarding an appropriate international legal mechanism".

In response to the invitation in Decision 18/32, the IFCS established an ad hoc Working Group on POPs (Working Group). This report presents the outcome of the work of the IFCS Working Group that met in an open forum in which representatives from 32 countries, 7 non-governmental organizations and 7 intergovernmental organizations participated. Sections 1 to 3 of the report provide information on the background, mandate and work programme undertaken, section 4 presents the conclusions and recommendations of the IFCS Working Group, and section 5 contains specific recommendations of the IFCS to the UNEP Governing Council and the World Health Assembly.

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1. BACKGROUND

1. Persistent organic pollutants (POPs) are organic compounds of natural or anthropogenic origin that resist photolytic, chemical and biological degradation. They are characterised by low water solubility and high lipid solubility, resulting in bioaccumulation in fatty tissues of living organisms. POPs are semi-volatile and, therefore, able to move long distances in the atmosphere, and are also transported in the environment in low concentrations by movement of fresh and marine waters, resulting in wide-spread distribution across the earth, including regions where they have never been used. Thus, both humans and environmental organisms are exposed to POPs around the world, in many cases for extended periods of time.

2. Over the past several years, the risks posed by POPs have become of increasing concern to many countries, resulting in actions to protect human health and the environment being taken or proposed at the national level, the regional level (for example the UN ECE Convention on Long Range Transboundary Air Pollution (LRTAP), the North American Commission for Environmental Cooperation, the Arctic Environmental Protection Strategy, and the Barcelona Resolution on the Environment and Sustainable Development in the Mediterranean Basin) and, more recently, in international initiatives, such as the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, and Decisions taken at the eighteenth session of the UNEP Governing Council (GC) (May 1995).

2. MANDATE:

3. At the May 1995 meeting of the UNEP GC, Decision 18/32 was adopted on POPs, inviting the Inter-Organization Programme for the Sound Management of Chemicals (IOMC), working with the International Programme on Chemical Safety (IPCS) and the Intergovernmental Forum on Chemical Safety (IFCS), with the assistance of an *ad hoc* working group, to initiate an expeditious assessment process, initially beginning with a short-list of twelve POPs[1] *(i.e.*, PCBs, dioxins, furans, aldrin, dieldrin, DDT, endrin, chlordane, hexachlorobenzene, mirex, toxaphene and heptachlor).

Except as otherwise noted, the use of the term POPs in this report is to be interpreted as the initial list specified in the UNEP GC Decision 18/32

4. As specified in the following text taken from Decision 18/32, this process should, taking into account the circumstances of developing countries and countries with economies in transition:

"*a) consolidate existing information available from IPCS, UN ECE and other relevant sources, on the chemistry and toxicology of the substances concerned (particularly the impact on human, plant and animal health);*

b) analyze the relevant transport pathways and the origin, transport and deposition of these substances on a global scale;

c) examine the sources, benefits, risks and other considerations relevant to production and use;

d) evaluate the availability, including costs and effectiveness, of preferable substitutes, where applicable; and

e) assess realistic response strategies, policies and mechanisms for reducing and/or eliminating emissions, discharges and losses of POPs."

5. Based on the results of this process, together with the outcome of the UNEP Intergovernmental Conference to Adopt a Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (Washington, D.C., 23 October - 3 November 1995), the IFCS is invited to develop recommendations and information on international action, including any information that would be needed for a possible decision on an appropriate international legal mechanism on POPs, to be considered at the 1997 sessions of the UNEP GC (January) and the World Health Assembly (WHA, May).

6. At the UNEP meeting in Washington (23 Oct. - 3 Nov. 1995), countries adopted a Global Programme of Action for the Protection of the Marine Environment which, in part, recognized the importance of controlling releases of POPs, specified actions that should be taken on POPs, and encouraged countries to participate actively in implementing Decision 18/32. The following paragraph from the *Washington Declaration on Protection of the Marine Environment from Land-based Activities* (2 November 1995) should, therefore, be taken into consideration in implementing Decision 18/32.

"17. Acting to develop, in accordance with the provisions of the Global Programme of Action, a global, legally binding instrument for the reduction and/or elimination of emissions, discharges and, where appropriate, the elimination of the manufacture and use of the persistent organic pollutants identified in decision 18/32 of the Governing Council of the United Nations Environment Programme. The nature of the obligations undertaken must be developed recognizing the special circumstances of countries in need of assistance. Particular attention should be devoted to the potential need for the continued use of certain persistent organic pollutants to safeguard human health, sustain food production and to alleviate poverty in the absence of alternatives and the difficulty of acquiring substitutes and transferring of technology for the development and/or production of those substitutes;"

7. In accordance with the Global Programme of Action, the Fourth Session of the Commission on Sustainable Development (18 April-3 May, 1996, New York) recognised the intention of the governments to take action to develop a global legally binding instrument on POPs.

3. WORK PROGRAMME TO IMPLEMENT UNEP GC DECISION 18/32:

8. In response to Decision 18/32, a meeting to establish an IOMC *ad hoc* working group (Working Group) was convened by UNEP on behalf of the IOMC on 28 October 1995 (Washington, D.C.). The meeting agreed on terms of reference for the Working Group, discussed the work programme that would be necessary to implement Decision 18/32, and proposed that the Working Group include representatives of the six IOMC organizations, UN ECE, four countries from each of the 5 UN regions (providing a global mix of countries producing, exporting, importing, using and/or receiving POPs), four industry associations, four public interest groups, and a Chair (Canada). Any additional participants were welcome as observers, and regional networking was encouraged to ensure the input of a broad representation of views.

9. Following its formation on 28 October 1995, the Working Group:

(a) developed a work plan and identified resource needs to implement the requirements of Decision 18/32;

(b) took note of the outcome of the UNEP Intergovernmental Conference to Adopt a Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (Washington, D.C., 23 October - 3 November 1995);

(c) secured agreement on the proposed work plan at the second meeting of the Inter-Sessional Group of the IFCS (ISG-2, Canberra, Australia, 5-8 March 1996);

(d) submitted for consideration at ISG-2, a report developed by a consultant to the IPCS (ISG/96.5B[2]) that summarized the available scientific information on the chemistry, toxicology, transport pathways, origin, transport and deposition of the 12 specified POPs on a global scale, in addition to some information on the socio-economic issues associated with the production, use and preferable substitutes for POPs;

(e) was adopted as an IFCS *ad hoc* Working Group on POPs (Working Group) by the ISG-2 to continue the assessment process and develop recommendations and information on international action, including any information that would be needed for a possible decision on an appropriate international legal mechanism on POPs;

(f) met as the IFCS Working Group in Canberra (9 March 1996) to make practical arrangements to implement the work plan accepted by ISG-2;

(g) coordinated an IFCS experts meeting in Manila (17-19 June 1996), co-hosted by the Republic of the Philippines and Canada, to address tasks[3] c) and d) of UNEP GC 18/32 as well as socio-economic issues associated with production and use of POPs and with preferable substitute products and technologies;

(h) met, in an open forum, in Manila (21-22 June 1996) to review the results of the experts meeting, to assess realistic response strategies, policies and mechanisms for reducing and/or eliminating emissions, discharges and losses of POPs, and to develop a report containing information and recommendations

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Persistent Organic Pollutants, An Assessment Report on : DDT, Aldrin, Dieldrin, Endrin, Chlordane, Heptachlor, Hexachlorobenzene, Mirex, Toxaphene, Polychlorinated biphenyls Dioxins and Furans, December 1995, ISG/96.5B

see para 4 above

on international action, to be considered at the 1997 sessions of the UNEP GC (January) and the World Health Assembly (WHA, May);

(i) distributed the report of the Working Group to all IFCS contact points for comments with a request for response by 31 July 1996;

(j) submitted the report to UNEP and WHA, together with a summary of the comments provided by IFCS participants; and

(k) will have completed its work following consideration of the POPs issue at the 1997 sessions of UNEP GC and WHA.

10. The Working Group was supported in its efforts by UNEP and the IFCS Secretariat. Additionally, UNEP established an information clearing house on POPs including an "open file" in the form of an electronic POPs data base on the INTERNET in response to conclusions at ISG-2 that there was a requirement for improved access to existing and future information on issues that were being addressed by the Working Group.

11. In the assessment process required by Decision 18/32, the Working Group took into account related initiatives including:

(a) UNEP GC Decision 18/12, which concerns the development of a legally binding instrument for the application of the Prior Informed Consent (PIC) procedure for certain hazardous chemicals in international trade, taking into account the activities undertaken in accordance with Decision 18/32 and recognizing that some of the POPs specified in Decision 18/32 are covered by the present voluntary PIC procedures;

(b) UNEP GC Decision 18/31 which encouraged support for the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities[4] (wherein specific reference was made to POPs) that was subsequently accepted at the UNEP Intergovernmental Conference, as reflected in the *Washington Declaration on Protection of the Marine Environment from Land-based Activities*[5], and that will involve countries in

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UNEP(OCA)/LBA/IG.2/7, 5 December 1995

UNEP (OCA)/LBA/IG.2/6, Annex II

implementing national, regional and international activities to implement the Programme;

(c) the negotiations on a possible POPs protocol under the UN ECE Convention on LRTAP, initiated in 1996, as approved by the Executive Body at its meeting of 28 November to 1 December 1995; and

(d) the regional seas agreements, including conventions and protocols.

12. During the 21-22 June 1996 meeting of the Working Group, some participants met to consider the issue of an integrated mechanism or structure covering the various international instruments on chemical safety with the aim of ensuring coherence and avoiding duplicated effort. This group noted the issue needs further consideration.

4. CONCLUSIONS AND RECOMMENDATIONS OF THE IFCS *ad hoc* WORKING GROUP ON POPs

13. Based on the documentation and the discussions that took place during the meetings of the UNEP sponsored IOMC *ad hoc* Working Group on POPs (28 October 1995), the ISG-2 (5-8 March 1996), the IFCS *ad hoc* Working Group on POPs (9 March and 21-22 June 1996), and the IFCS Manila experts meeting (17-19 June 1996), the following conclusions and recommendations are provided to the UNEP Governing Council and the World Health Assembly by the IFCS *ad hoc* Working Group on POPs on behalf of the IFCS.

4.1 General:

14. The **IFCS concluded** that available information on tasks a) to d) of UNEP GC Decision 18/32 is sufficient to demonstrate the need for international action on the 12 specified POPs and to move forward on realistic response strategies.

15. **IFCS concluded** that international action, including a global legally binding instrument, is required to reduce the risks to human health and the environment arising from the release[6] of the 12 specified POPs.

16. **IFCS concluded** that action programs must take into account that the 12 specified POPs include pesticides, industrial chemicals, and unintentionally produced by-products and contaminants, and that, in the framework of overarching objectives to be negotiated by an intergovernmental negotiating committee (INC), different approaches are needed for each category of POPs.

17. **IFCS concluded** that a process will be required to develop science-based criteria and a procedure for identifying POPs in addition to the 12 specified in Decision 18/32 as candidates for future international action and **recommended** that an expert group be established to carry out this work. The process should incorporate criteria pertaining to persistence, bioaccumulation, toxicity and exposure in different regions, and should take into account dispersion mechanisms for the atmosphere and the hydrosphere, migratory species and the need to reflect possible influences of marine transport and tropical climates.

18. **IFCS recommends** that the expert group include scientific and socio-economic expertise relevant to the POPs issue and be representative of countries in different stages of development and from different geographical regions, as well as participants from relevant nongovernmental and intergovernmental organizations. The expert group should consider the criteria and procedure being considered by the UN-ECE and should also take full account of varied ecosystems and the circumstances of developing countries and countries with economies in transition, as well as the need to conserve biodiversity and protect endangered species. The principles set out in the Rio Declaration, especially Principle 15 which includes a reference to the precautionary approach, and the provisions of Chapter 19 of Agenda 21 should also be taken into account.

19. **IFCS concluded** that coordination among different regional and international initiatives on POPs is essential to ensure harmonized environmental and health outcomes from mutually supportive and effective programs that result in the development of policies with complementary, and non-conflicting, objectives.

The term "release" is used throughout to encompass emissions, discharges and losses of POPs consistent with the language of UNEP Governing Council Decision 18/32.

20. **IFCS recognized** the work already underway within the UN-ECE to develop a regional protocol on POPs and **concluded** that the elements under development for this protocol should be given due consideration in the development of a global legally binding instrument. To facilitate coordination with POPs work under the UN ECE, interested non-ECE countries are encouraged to consider participation in relevant meetings on the development of the UN-ECE protocol on POPs.

21. The **IFCS recognized** the need to provide for comprehensive reporting of additional peer reviewed scientific information and that there are information gaps in the areas of production, use and alternatives[7]. **IFCS concluded** that measures are needed for the development and sharing of information on the 12 specified POPs including:

(a) comprehensive reporting and information exchange, within and between countries and intergovernmental organizations, for:

(i) peer reviewed scientific information on the chemistry, toxicology, transport pathways, origin, transport and deposition of the 12 specified POPs on a global scale, in order to provide current baseline and future trend data for commercial activity, release rates, and levels in environmental and biological media, and to ensure that response strategies are realistic and appropriate, and to provide a basis for assessing progress;

(ii) information on the sources, benefits, risks and other considerations relevant to production, use, and release of the 12 specified POPs; and

(iii) information on evaluation of the availability, costs, risks and effectiveness of preferable alternatives for the 12 specified POPs, where applicable;

(b) improved access to national information on POPs, as well as improved access to information by all countries, especially developing nations; and

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"alternatives" refers to both chemical and non-chemical alternatives, and includes substitute products, alternative technologies and other approaches.

(c) improved access to existing and future information on POPs issues by maintaining the UNEP clearing house for information on POPs, including the electronic data base on the INTERNET;

and further **recommended** that UNEP initiate action on these measures, in collaboration with other international and regional organizations to avoid duplication.

22. **IFCS noted** that regional and sub-regional networking could play an important role in assisting developing countries to address various issues on POPs.

23. **IFCS concluded** that participation of developing countries in responding to international action on POPs is essential. The appropriate international and regional mechanisms should be developed or better used in order to assist in meeting their needs, including:

(a) training trainers and training workers;

(b) information exchange;

(c) institutional infrastructure; strengthening legislation and enforcement capabilities, and development of adequate domestic regulation and standards to control and eliminate adverse health and environmental impacts of POPs pesticides;

(d) strengthening of regional and sub-regional co-operation;

(e) disposal capability;

(f) research facilities;

(g) capacity building;

(h) public awareness of alternatives and alternative technologies; and

(i) public awareness of hazards of POPs.

Technical assistance, capacity building and funding to address these needs were determined to be of practical consideration. All developing countries and some other countries recommended making direct reference to "shared

responsibilities" among countries, industry and appropriate international organizations. Other countries supported referencing the relevant principles of the Rio Declaration on Environment and Development and related Chapters of Agenda 21[8].

24. With respect to assistance to developing countries and countries with economies in transition, **IFCS:**

(a) **recommended** that bilateral and multilateral technical and financial assistance organizations give high priority to programmes to address POPs;

(b) **invited** the Council of the Global Environment Facility (GEF) to take into consideration the global significance of POPs in order to investigate the relationship between the need to develop capacity to address POPs and the four existing windows of the GEF operation strategy; and

(c) **supported** the action under way within the OECD and multilateral development banks to develop new or revise existing guidelines to ensure that investments involving any remaining manufacture, use, management and disposal of POPs are made in an manner that would discourage activities that result in increased releases of POPs and encourage the incorporation of pollution prevention approaches that avoid or limit POPs discharges in the projects they finance.

25. The **participants invited the IFCS** to assist in the identification of country capacity building needs, in cooperation with the IOMC and United Nations Institute on Training and Research, and to help identify possible sources of assistance and to facilitate partnerships between recipients and donors of available technical and financial assistance to address these needs.

4.2 Production, Use and Sources of POPs:

26. **IFCS concluded** that adequate information on sources and uses of POPs is essential to enable appropriate actions and responses to be undertaken that

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Final text of agreements negotiated by Governments at the United Nations Conference on Environment and Development (UNCED), 3-14 June 1992, Rio de Janeiro, Brazil.

would lead to productive and meaningful environmental and health actions/outcomes.

27. **IFCS concluded** that, based on available information:

(a) aldrin, dieldrin, endrin, and toxaphene are no longer produced, mirex and HCB[9] appear to be out of production, and no efforts are warranted to gain more production and use information;

(b) DDT is still produced for disease vector control, although it is misused for other purposes;

(c) chlordane and heptachlor are still produced for ant and termite control; and

(d) PCBs and HCB are not currently manufactured but are produced as unintended by-products.

28. **IFCS concluded** that more accurate information on the production and use of the pesticide POPs, especially those still in production, as well as baseline levels of environmental and biological media, should be obtained to understand better the magnitude of the problem, to establish a baseline with which to measure future progress, and to ensure selected response measures are appropriate. The collection of data should not delay action on the specified list of POPs.

29. **IFCS recommended** that UNEP, in concert with other relevant intergovernmental organisations, establish practical measures to evaluate and monitor the success of any implemented strategies where appropriate, including:

(a) baseline and trend data on the production, use and release of the 12 specified POPs; and

(b) monitoring networks to establish baseline and trend levels of the 12 specified POPs in environmental and biological media in all regions.

30. **IFCS concluded** that there are no stocks of dioxins/furans, but there are materials which may contain dioxins/furans as micro-contaminants. Other

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HCB is both a pesticide (fungicide) and an industrial chemical.

chlorine- and bromine-containing compounds may be a potential source of dioxin/furan release to the environment through their improper combustion and/or disposal. Soils and sediments in certain highly contaminated sites may also be significant sources.

4.3 Alternatives to pesticides and other POPs

31. **IFCS concluded** that there are alternatives (potentially including indigenous methods) for all the pesticide POPs, although at present the applicability of these alternatives for some uses may be limited in some parts of the world or in some situations.

32. **IFCS recommended** that the availability of information and expertise on alternatives to POPs should be improved through information exchange and education programmes, including: the further development of the UNEP information clearinghouse on POPs and alternatives, strengthened regional networks concerning POPs and alternatives, production of case studies on alternatives, and use of the global information network on chemicals (GINC) to enable governments to make their own decisions on replacing POPs with alternatives.

33. **IFCS recommended** that guidance on the selection of replacements for POPs pesticides should be developed; the guidance should cover non-chemical as well as chemical alternatives and include advice on the factors to be considered in choosing alternatives and sources of information. A proposed alternative should be considered inappropriate by national or regional governments if national or regional conditions make it unlikely that the alternative can be managed in ways that avoid significant injury to workers, local communities or the environment.

34. **IFCS concluded** that efforts should be taken to reduce the reliance on DDT for vector control and efforts should be directed toward making viable alternatives readily available, including indigenous medicinal plants, in order to phase out the use of DDT. However, DDT should only be used in the context of a fully integrated approach for vector control (*e.g.*, incorporating sanitation, public health programs, environmental management, etc.) and in accordance with related WHO Guidelines.

35. **IFCS observed** that, where applicable, it would be best to shift to approaches that reduce reliance on chemical pesticides, consistent with the principles of

Agenda 21. It was noted that many countries may not have sufficient financial and other resources to gain access to and develop alternative solutions. Assistance should be provided to developing countries that have embarked on research on viable alternatives.

36. **IFCS concluded** that the Swedish reports on alternatives to POPs (IFCS/EXP.POPs.4.CMPL, IFCS/EXP.POPs.5) and the report of the IFCS Experts Meeting on POPs (IFCS/EXP.POPs/Report.1), together with the information from the UNEP clearing house, could serve as resource documents for identifying some possible alternatives to the specified POPs.

4.4 Polychlorinated Biphenyls (PCBs)

37. **IFCS concluded** that the major sources of waste PCBs originate from electrical equipment requiring dielectric fluids, with a number of lesser sources including hydraulic fluids and sealants. The substitutes for PCBs are well known and readily available.

38. **IFCS recommended** that national, regional or international action be taken in order to ensure environmentally sound handling and disposal of PCBs. This action should include:

(a) identification of where PCBs are found;

(b) inventories of PCBs in use, stockpiles of PCBs, as well as PCB-containing waste; and

(c) an inventory of available destruction capacity for PCBs world-wide in order to get a better understanding of regional availability and the need, if any, for increasing the capacity in the coming years.

39. **IFCS recommended** that appropriate international organizations, in particular members of the IOMC in close consultation with the IFCS and national governments, develop a check list or simple guidelines on how to identify PCB-containing materials that would be useful for countries who have not yet made such an identification, especially developing countries or countries with economies in transition. **IFCS noted** that the setting up of such a check list or guidelines should not in any way hinder or delay the dissemination of information or ongoing national inventories.

4.5 Unintentionally Produced By-products and Contaminants:

40. **IFCS concluded** that the appropriate issues relative to global management of dioxins/furans are:

(a) ensuring the application of appropriate techniques and/or materials policies that minimize and/or eliminate releases of dioxins/furans;

(b) the benefits provided by the material compared to the availability and practicality (particularly in developing countries) of alternative materials and manufacturing processes; and

(c) safe disposal facilities and appropriate waste management facilities.

41. **IFCS concluded** that knowledge on the general characteristics of releases of dioxins/furans on a world-wide scale would be useful in negotiating and implementing a global instrument on POPs to focus realistic actions to reduce and/or eliminate releases of these substances and to evaluate the effectiveness in the future of those actions.

42. With regard to those listed POPs that are generated as unwanted by-products, **IFCS concluded** that there is less knowledge and/or agreement on the full extent to which release reduction and/or source elimination can be achieved by currently available means in ways that are feasible and practical and can achieve a realistic and meaningful level of release reduction and/or source elimination. There may be substantial differences between developed countries, developing countries and countries with economies in transition regarding means that are available, feasible and practical.

43. **IFCS concluded** that present generation best technology waste incineration facilities are expensive to construct, sophisticated to operate and their widespread deployment in many developing countries is unlikely in the near future. Other options including transport to existing facilities and/or use of other proven disposal methodologies and/or materials policies should be further explored. If transboundary movement is involved, this approach will require consideration of existing instruments and their adequacy as well as mobile destruction facilities.

44. **IFCS recommended** that countries identify national sources of dioxin/furan releases, using as guidance the sources already identified by developed countries.

45. **IFCS recommended** that cooperative programs (particularly of a regional nature) on aspects of dioxin/furan management be undertaken between developed and developing countries and countries with economies in transition, in coordination with activities of the IOMC organizations.

4.6 Other Proposed Actions

46. For the listed POP pesticides and industrial chemicals that are or have been intentionally produced[10], **IFCS concluded** that, other than for the small number of remaining recognized uses, these POPs pose unreasonable and otherwise unmanageable risks to human health and the environment such that **IFCS recommended**:

(a) for the listed POP pesticides, measures should be taken to rapidly phase out remaining production and subsequent remaining use as alternatives are made available for the small number of remaining recognised uses; and

(b) for the listed POP industrial chemicals there is a need to phase out, over time, PCBs and HCB on a global scale and, in the transition to complete elimination of use, there is a need for managing remaining use, storage and disposal.

47. **IFCS recommended** that, for POPs[10] that are generated as unwanted by-products, currently available measures that can achieve a realistic and meaningful level of release reduction and/or source elimination should be pursued expeditiously, and this should be done by actions that are feasible and practical and additional measures should be explored and implemented.

48. **IFCS recommended** that realistic action be taken to destroy obsolete stocks of the listed POPs[10] and remediate environmental reservoirs. Manufacturers and exporting and importing countries should work together to solve the problem on a priority basis, taking into account the following considerations:

These conclusions and recommendations are without prejudice to the treatment of any additional POPs that might later be identified.

(a) destruction technologies are available that may be appropriate and practical in some cases;

(b) in many regions, particularly in the developing countries, society still lacks appropriate and adequate destruction facilities and the costs associated with providing them may be greater than what the region can afford without technical and other assistance;

(c) in many cases, full remediation of environmental reservoirs may not be technically or economically feasible or practical; and

(d) better information on the amount of obsolete stocks is required.

49. **IFCS concluded** that there is need to develop new cost-effective small-scale technologies for destruction and remediation of wastes associated with obsolete chemical stocks of POPs. Where no immediate permanent solutions are available, urgent action needs to be taken to ensure that these stocks are not available for use and that they are stored in a manner that prevents immediate risks to public health and the environment.

5. IFCS RECOMMENDATIONS TO UNEP GC AND WHA:

50. Based on the information assessed in implementing UNEP GC Decision 18/32, and the conclusions and recommendations included in this report, the Intergovernmental Forum on Chemical Safety (IFCS) recommends to the UNEP Governing Council (GC) and the World Health Assembly (WHA) that:

51. UNEP GC and WHA **decide** that immediate international action should be initiated to protect human health and the environment through measures which will reduce and/or eliminate (as further elaborated in paragraphs 46, 47, 48) the emissions and discharges of the 12 POPs specified in UNEP GC Decision 18/32 and, where appropriate, eliminate production and subsequently the remaining use of those POPs that are intentionally produced.

52. UNEP GC and WHA **recognize** that in order to protect human health and the environment, such international action should include:

(a) use of separate differentiated approaches to take action on pesticides, industrial chemicals, and unintentionally produced by-products and contaminants;

(b) use of transition periods, with phased implementation for various proposed actions;

(c) careful and efficient management of existing stocks of the specified POPs and, where necessary and feasible, their elimination;

(d) training in enforcement and monitoring of use to discourage the misuse of POPs pesticides; and

(e) remediation of contaminated sites and environmental reservoirs, where feasible and practicable.

53. UNEP GC and WHA **recognize** that international action should incorporate such practical measures as:

(a) the expeditious development of a global, legally binding instrument. The instrument should be developed in such a manner as to recognize ongoing activities on POPs and other related issues and institutions, as well as differing regional and national conditions and taking into account the special concerns of developing countries and countries with economies in transition. In addition, provision should be made for commitments at a national and regional level allowing for a higher level of protection than that afforded through the global instrument.

(b) voluntary measures, which may be implemented as a complement to, or independently of, a legally binding instrument;

(c) action at the national, regional and global levels, reflecting possible needs for different regional and sub-regional approaches and the need to find, at the national level, the most effective and appropriate mix of policy instruments and measures to implement agreed international commitments;

(d) consideration of unique customs codes for POPs chemicals, and labelling in compliance with guidelines under the FAO Code of Conduct;

(e) coordination among different regional and international initiatives on POPs to ensure harmonized environmental and health outcomes from mutually supportive and effective programs that result in the development of policies with complementary, and non-conflicting, objectives and that avoid overlap and duplication with other international and regional conventions and programmes; and

(f) input of scientific, technical and economic expertise and consideration of the ability of existing institutions and organisations to provide this input.

54. UNEP GC and WHA **note** that socio-economic factors should be addressed in developing and implementing international action including the following:

(a) possible impacts on food production;

(b) possible impacts on human health (e.g. for vector control agents);

(c) need for capacity building in countries and regions;

(d) financing concerns and opportunities; and

(e) possible trade impacts.

55. UNEP GC **invite** UNEP to prepare for and convene, together with other relevant international organisations, an intergovernmental negotiating committee (INC), with a mandate to prepare an international legally binding instrument for implementing international action initially beginning with the 12 specified POPs. Participation in the INC should be open to governments and relevant intergovernmental and non-governmental organizations consistent with UN applicable rules.

56. UNEP GC and WHA **note** the need to develop science-based criteria and a procedure for identifying additional POPs as candidates for future international action and **recommend** that the proposed INC be directed to establish, at its first meeting, an expert group to carry out this work. The group should work expeditiously, proceeding concurrently with the INC process, in order to develop criteria for consideration by the INC in the negotiation of a legally binding instrument. The process should incorporate criteria pertaining to persistence, bioaccumulation, toxicity and exposure in different regions, and should take into account dispersion mechanisms for the atmosphere and the

hydrosphere, migratory species and the need to reflect possible influences of marine transport and tropical climates.

57. UNEP GC **recommend** that the INC, in undertaking its work, take into account the conclusions and recommendations of the IFCS *ad hoc* Working Group on POPs.